

IN THE CLAIMS:

1. (Currently Amended) An isolated nucleic acid molecule encoding a fluorescent protein, wherein said protein has at least 85% 90% identity with full length SEQ ID NO: 10.

2-4. (Cancelled)

5. (Original) A vector comprising the nucleic acid molecule according to claim 1.

6. (Previously Presented) An expression cassette comprising

- (a) a transcriptional initiation region that is functional in an expression host;
- (b) the nucleic acid molecule according to claim 1; and
- (c) a transcriptional termination region functional in said expression host.

7. (Previously Presented) A host cell or progeny thereof, comprising the expression cassette according to claim 6 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

8. (Previously Presented) A transgenic cell, or progeny thereof, comprising the nucleic acid molecule according to claim 1.

9. (Withdrawn) A transgenic plant comprising the nucleic acid molecule according to claim 1.

10. (Withdrawn) A transgenic animal comprising the nucleic acid molecule according to claim 1.

11. (Withdrawn) A method for producing a fluorescent protein, said method comprising

- (a) providing an expression cassette according to claim 6
- (b) expressing the fluorescent protein from the nucleic acid molecule, and
- (c) isolating the protein substantially free of other proteins.

12. (Cancelled)

13. (Currently Amended) [[A]] The nucleic acid molecule according to claim 1, wherein said nucleic acid comprises having a sequence that is substantially the same as, or identical to a nucleotide sequence of at least 300 contiguous nucleotides in length of SEQ ID NO:9 the nucleic acid molecule according to claim 1.

14. (Withdrawn) An isolated fluorescent protein that is encoded by the nucleic acid molecule according to claim 1.

15. (Withdrawn) A fusion protein comprising the protein according to claim 14.

16. (Withdrawn) An antibody specifically binding to the protein according to claim 14.

17. (Previously Presented) A kit comprising at least one nucleic acid molecule according to claim 1.

18-27. (Cancelled)

28. (Currently Amended) The nucleic acid molecule according to the claim 1 which encodes full length SEQ ID NO: 10.

29. (Cancelled)

30. (Currently Amended) The nucleic acid molecule according to claim 1, having a nucleotide sequence comprising full length SEQ ID NO: 9.

31. (Currently Amended) The nucleic acid molecule according to Claim 1, wherein said nucleic acid molecule encodes a fluorescent protein having at least 90% 95% identity with full length SEQ ID NO: 10.

32. (Currently Amended) The nucleic acid molecule according to Claim 1, having a nucleotide sequence having at least 90% 95% identity with full length SEQ ID NO:9.

33. (Previously Presented) The nucleic acid molecule according to Claim 1, wherein the protein comprises a fluorophore.